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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,917	05/01/2001	Thomas Joseph Killian	2685/5434	4661

7590 07/21/2005
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EXAMINER

MEW, KEVIN D

ART UNIT PAPER NUMBER

2664

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/846,917	Applicant(s) KILLIAN, THOMAS JOSEPH	
	Examiner Kevin Mew	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Final Action

Response to Amendment

1. Applicant's Remarks/Arguments filed on 2/2/2005 regarding claims 1-35 have been fully considered and are currently pending.
2. Acknowledgement is made of the amended abstract regarding the objection to the specification cited in the previous Office Action. The correction is acceptable and the objection to the specification has been withdrawn.
3. Acknowledgement is made of the amended claim 28 regarding the claim objection cited in the previous Office Action. The correction is acceptable and the claim objection has been withdrawn.
4. Acknowledgement is made of the amended claim 9 regarding the 35 U.S.C. 112, second paragraph rejection cited in the previous Office Action. The correction is acceptable and the 35 U.S.C. 112 second paragraph rejection has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-9, 11-12, 14-21, 23-29, 31** are rejected under 35 U.S.C. 102(e) as being anticipated by Tingley et al. (US Publication 2002/0138628).

Regarding claim 1, Tingley discloses a system for exchanging information on a network (see server farm configuration of the system in Fig. 3; note that the system comprises elements 60, 62, 64, 66, 68, 70, 72, 64, 76, 78), comprising:

a switch (the switch here is a combination of Virtual Networking Device 62 and switch 66, see elements 62 and 66, Fig. 3) coupled to a port (the end point of the Virtual Network Specific Ethernet Link 68 is interpreted as a port that couples to the Virtual Networking Device, see elements 74, 68, and 62, Fig. 3);

an address table (Virtual Networking Device maintains a translation table that maps IP addresses to Ethernet/MAC addresses, see page 5, paragraph 0049, lines 1-8 and Fig. 5);

a computer (servers for Virtual Network A, see element 74, Fig. 3) having an address (the server has a physical address, see page 2, paragraph 0011, lines 18-23), said computer coupled to said port (servers for Virtual Network A is coupled to the end point of the Virtual Network Specific Ethernet Link 68, see Fig. 3); and

a private network (Virtual Network A) assigned to said port (port-based Virtual Network) by said switch (switch 66 assigns ports to Virtual Network, see page 2, paragraph 0012, lines 1-13) according to said address table (the switch uses the Virtual Network Identifier included in the packet by the Virtual Networking Device, see page 2, paragraph 0012, lines 1-13; note that the Virtual Network Identifier is an entry field in the translation table of the Virtual Networking Device, see Fig. 5).

Regarding claim 2, Tingley discloses the system of claim 1, wherein said private network is a virtual local area network (Virtual Network is identified by VLAN ID, which shows that the Virtual Network is a virtual local area network, see page 4, paragraph 0041, lines 1-3).

Regarding claim 3, Tingley discloses the system of claim 1, wherein said address table is stored at said switch (Virtual Networking Device maintains a translation table that maps IP addresses to Ethernet/MAC addresses, see page 5, paragraph 0049, lines 1-8 and Fig. 5).

Regarding claim 4, Tingley discloses the system of claim 1, wherein said address table includes an address to identify said computer (Ethernet/MAC address, see page 5, paragraph 0049, lines 1-11 and Fig. 5).

Regarding claim 5, Tingley discloses the system of claim 4, wherein said address is a media access control address (MAC address, see page 5, paragraph 0049, lines 1-11 and Fig. 5).

Regarding claim 6, Tingley discloses the system of claim 1, wherein said switch includes a wire to said port (see the Virtual Network Specific Ethernet Link 68 that connects switch 66 to the end point of Virtual Network A, Fig. 3).

Regarding claim 7, Tingley discloses the system of claim 1, further comprising an Ethernet switch for controlling an Ethernet network (Switch 66, see element 66, Fig. 3).

Regarding claim 8, Tingley discloses the system of claim 1, further comprising a broadband connection connecting said network with an external virtual private network (see page 7, paragraph 0066, lines 1-14).

Regarding claim 9, Tingley discloses a method for communicating over a network from a plurality of ports, the method comprising:

issuing a data packet having an address from a computer (a server from a Virtual Network sends an ARP request packet having a virtual IP address, see page 2, paragraph 0011, lines 5-9 and 18-23 and Fig. 3) connected to a port (a server for Virtual Network A is connected to connected to an endpoint of switch 66, see Fig. 3);

determining a network (core network, see element 60, Fig. 3) accessible by said computer (server from a Virtual Network, see element 74, Fig. 3) according to an address table using said address (Virtual Networking Device on the edge of the core network receives the ARP request packet from Virtual Network A and translates the IP address of the request packet into

Ethernet/MAC address of the Virtual Router responsible for responding to the request in the core network, see page 4, paragraph 0041, lines 1-11 and Fig. 3); and

assigning said network to said port by said switch (switch 66 assigns ports to Virtual Networks, see page 2, paragraph 0012, lines 1-5 and Figs. 3 and 5).

Regarding claim 11, Tingley discloses the method of claim 9, further comprising accessing said address table containing said address (see page 5, paragraph 0049, lines 1-8).

Regarding claim 12, Tingley discloses the method of claim 11, further comprising updating said address table (storing the Ethernet/MAC address of the response in the Ethernet/MAC address field of the entry in the translation table, see page 5, paragraph 0050, lines 30-35).

Regarding claim 14, Tingley discloses the method of claim 9, further comprising sending an alarm message when said address does not correspond to said network (ARP request packet and the destination address are added to a table of unresolved entries, see page 7, paragraph 0064, lines 1-7; this table of unresolved entries is considered as an alarm message).

Regarding claim 15, Tingley discloses the method of claim 9, further comprising receiving data from said network at said port (Virtual Networking Device receives ARP request packet from Virtual Network A at a designated port of switch 66, see page 4, paragraph 0041, lines 1-11 and Fig. 3).

Regarding claim 16, Tingley discloses the method of claim 9, further comprising accessing shared resources from said port (VLAN tagged Ethernet link is shared resources from the port that couples to Virtual Network A, see element 64, Fig. 3).

Regarding claim 17, Tingley discloses a method for assigning (see page 2, paragraph 0012, lines 1-18) an external network (core network, see element 60, Fig. 3) to a port (a port that couples to Servers for Virtual Network A) using a switch (a switch which is a combination of Virtual Networking Device 62 and Switch 66, see Fig. 3), comprising:

receiving data from said external network (Servers for Virtual Network receives data from core network 60, see page 2, paragraph 0012, lines 6-10, Fig. 3);

sending a data packet to said port (core network sending packets to Servers for Virtual Network, see page 2, paragraph 0012, lines 6-10);

retrieving an address from said port in response to said data packet (the Virtual Networking Device looks up the entry that corresponds to the destination IP address, see page 2, paragraph 0012, lines 1-8);

creating a virtual network correlating to said external network (Switch 66 inserts Virtual Network Identifier information into the packet header to mark it as belonging to a particular Virtual Network, see page 2, paragraph 0012, lines 13-18); and

assigning said virtual network to said port according to said address (switch 66 assigns port-based Virtual Network to distribute packets to the proper servers and such servers are

accessible via virtual IP addresses within the private IP address spaces of the associated Virtual Networks, see page 2, paragraph 0012, lines 1-5 and page 1, paragraph 0010, lines 12-16).

Regarding claim 18, Tingley discloses the method of claim 17, further comprising finding said address in an address table at said switch (locating the source IP address of the packet response in the translation table of the Virtual Networking Device, see page 5, paragraph 0050, lines 1-36).

Regarding claim 19, Tingley discloses the method of claim 17, wherein said receiving step includes receiving said data via an Ethernet hub (switch 66 is an Ethernet hub, see Fig. 3).

Regarding claim 20, Tingley discloses a switch coupled to a broadband connection (see page 7, paragraph 0066, lines 1-14), and connected to a plurality of ports (see the endpoints of the Virtual Network Specific Ethernet Links 68, 70, 72, Fig. 3), comprising:

an address table listing addresses that correspond to a plurality of private networks (translation table that comprises VLAN ID that identifies each of the Virtual Networks, see Fig. 5); and

switch fabric (switch 66, see element 66, Fig. 3) coupled to said plurality of ports to support said plurality of private networks (see the endpoints of the Virtual Network Specific Ethernet Links 68, 70, 72 that couple switch 66 to Virtual Networks A, B, C, respectively, Fig. 3).

Regarding claim 21, Tingley discloses the switch of claim 20, further comprising a memory that stores said address table (each of the entries in the table 120 of Fig. 5 would be the leaf of a tree data structure, see page 7, paragraph 0059, lines 18-19).

Regarding claim 23, Tingley discloses a switch (a switch which is a combination of Virtual Networking Device 62 and Switch 66, see Fig. 3) that assigns ports (assigning port-based Virtual Networks, see page 2, paragraph 0012, lines 1-18), said switch coupled to a computer-readable medium (memory), said computer-readable medium having instructions stored thereon (Virtual Networking Device consists of processors and associated memory for program code storage, see page 21, paragraph 0027, lines 10-13), the instructions comprising steps for:

receiving data from said external network (Servers for Virtual Network receives data from core network 60, see page 2, paragraph 0012, lines 6-10, Fig. 3);

sending a data packet to said port (core network sending packets to Servers for Virtual Network, see page 2, paragraph 0012, lines 6-10);

retrieving an address from said port in response to said data packet (the Virtual Networking Device looks up the entry that corresponds to the destination IP address, see page 2, paragraph 0012, lines 1-8);

creating a virtual network correlating to said external network (Switch 66 inserts Virtual Network Identifier information into the packet header to mark it as belonging to a particular Virtual Network, see page 2, paragraph 0012, lines 13-18); and

assigning said virtual network to said port according to said address (switch 66

assigns port-based Virtual Network to distribute packets to the proper servers and such servers are accessible via virtual IP addresses within the private IP address spaces of the associated Virtual Networks, see page 2, paragraph 0012, lines 1-5 and page 1, paragraph 0010, lines 12-16).

Regarding claim 24, Tingley discloses the switch of claim 23, farther comprising switch fabric (switch 66, see Fig. 3) coupling said switch (a combination of switch 66 and Virtual Networking Device, see element 62, Fig. 3) to said ports (see the endpoints of Virtual Networks A, B, and C, Fig. 3).

Regarding claim 25, Tingley discloses a broadband connection system, comprising:
an Ethernet hub (switch 66, see Fig., 3) for supporting virtual private networks (for supporting Virtual Networks A, B, and C, see Fig. 3); and

a switch (Virtual Networking Device, see element 62, Fig. 3) having an address table (Virtual Networking Device maintains a translation table, see page 5, paragraph 0049, lines 1-5) to assign said virtual private networks according to an address table (Virtual Networking Device inserts a VLAN ID field containing information identifying the associated Virtual Network for each packet, see page 5, paragraph 0047, lines 7-10).

Regarding claim 26, Tingley discloses the broadband connection system of claims 25, further comprising ports coupled to said switch (see endpoints of switch that couple to Virtual Networks A, B, and C, Fig. 3), wherein said virtual private networks are assigned to said ports

(switch 66 assigns port-based Virtual Network in order to distribute packets to the proper servers of the Virtual Network, see page 2, paragraph 0012, lines 1-5).

Regarding claim 27, Tingley discloses the broadband connection system of claim 25, further comprising an address stored in said address, said address correlating to one of said virtual private networks table (IP address, see Fig. 5).

Regarding claim 28, Tingley discloses a method for exchanging information over a virtual local area network (Virtual Network A, see Fig. 3) at a port (see the endpoint of Virtual Network A, Fig. 3), comprising:

receiving a data packet from a computer (core network, see element 60, Fig. 3) at said port (Servers for Virtual Network A receive data packets from core network, see page 2, paragraph 0012, lines 5-10);

issuing a data packet having an address from said computer (core network sending ARP request packets containing virtual IP address to Servers for Virtual Network, see page 2, paragraph 0012, lines 6-10 and page 1, paragraph 0010, lines 6-9) to a switch (a switch is a combination of the Virtual Networking Device and switch 66, see Fig. 3);

identifying said virtual local area network according to said address (virtual IP address identifies Virtual Network, see page 1, paragraph 0011, lines 18-23, and page 2, paragraph 0013, lines 1-8);

assigning said virtual local area network to said port (assigning port-based Virtual Network, see page 2, paragraph 0012, lines 1-5);

accessing said virtual local area network (accessing Virtual Networks A, B, C, see Fig. 3) to said computer (core network, see Fig. 3) at said port (the port assigned by switch 66, see page 2, paragraph 0012, lines 1-5); and

exchanging information over said virtual local area network from said computer (core network sending ARP packets to Virtual Network) to a virtual private network (to servers for Virtual Network, see page 2, paragraph 0012, lines 1-18 and Fig. 3), wherein said virtual private network corresponds to said address (virtual IP address corresponds to a Virtual Network, see page 2, paragraph 0013, lines 1-8).

Regarding claim 29, Tingley discloses the method of claim 28, wherein said identifying includes accessing an address table at said switch, said address table storing said address corresponding to said virtual local area network (translation table that comprises IP address that corresponds to each VLAN ID, see Fig. 5).

Regarding claim 31, Tingley discloses the method of claim 28, further comprising blocking said computer from said virtual local area network when said address is not identifiable by said switch (when there is no ARP reply, a table entry for the destination IP address would be deleted from the table of the unresolved entries, resulting in packet being discarded, see page 7, paragraph 0065, lines 1-11; when there is no ARP reply, connection would be established from the core network to the Virtual Network).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10, 13, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tingley in view of Miner (USP 6,804,332).

Regarding claim 10, Tingley discloses all the aspects of the claimed invention set forth in the rejection of claim 9 above, except fails to explicitly show the method of claim 9, further comprising determining if said port is assigned.

Regarding claim 13, Tingley discloses all the aspects of the claimed invention set forth in the rejection of claim 9 above, except fails to explicitly show the method of claim 9, further comprising unassigning said port when said computer is disconnected from said network. However, Miner discloses an electronic assistant device that comprises a switching resource to switch multiple communications channels together (see col. 9, lines 28-30 and col. 10, lines 28-29 and Fig. 2). Miner further discloses the switching resource will deallocate ports from the channel when the subscriber is disconnected from a call session (see col. 35, lines 7-20) and would reallocate the port for use to other channels if the port becomes unassigned. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the port assigning operation of the switch in Tingley with the port deallocation method of Miner when the subscriber is disconnected from the network. The motivation to do so is to

detect the availability of a port for use in a channel connection because other sessions would then be able to use the deallocated port for exchanging information.

Regarding claim 30, Tingley discloses all the aspects of the claimed invention set forth in the rejection of claim 28 above, except fails to explicitly show the method of claim 28, further comprising revoking access at said port when said virtual local area network is terminated. However, Miner discloses an electronic assistant device that comprises a switching resource to switch multiple communications channels together (see col. 9, lines 28-30 and col. 10, lines 28-29 and Fig. 2). Miner further discloses the switching resource will deallocate ports from the channel when the subscriber is disconnected from a call session (see col. 35, lines 7-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the port assigning operation of the switch in Tingley with the port deallocation method of Miner when the subscriber is disconnected from the network. The motivation to do so is to free up the resources that are required to support the connection because other sessions would then be able to use the deallocated port for other connections.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tingley in view of Thornton et al. (USP 6,363,065).

Regarding claim 22, Tingley discloses all the aspects of the claimed invention set forth in the rejection of claim 28 above. Tingley further discloses storing the Ethernet/MAC address of the response in the Ethernet/MAC address field of the entry in the translation table (see page 5, paragraph 0050, lines 30-35). Tingley does not explicitly show the switch of claim 20, wherein

said addresses are deleted from said address table. However, Thornton discloses a routing process in which the routing table would add or delete addresses (see col. 37, lines 11-17).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the entry population in the address table of the switch in Tingley with the method of deleting addresses from the address table during the routing process as taught by Thornton. The motivation to do so is to dynamically remove addresses from the address table after a predetermined period of time so that the storage space saved by removing the address can be used for storing other new addresses.

8. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tingley in view of Fluss (USP 6,304,578).

Regarding claim 32, Tingley discloses a system for exchanging information (see Fig. 3) from a plurality of ports (see endpoints from switch 66 to Virtual Networks A, B, and C) to external private networks (Virtual Networks A, B, and C), comprising:

a switch (a switch that is a combination of Virtual Networking Device 62 and Switch 66, see Fig. 3) coupled to said plurality of ports (see endpoints that couple Switch 66 to Virtual Networks A, B, and C), said switch including an address table (Virtual Networking Device maintains a translation table that maps IP addresses to Ethernet/MAC addresses, see page 5, paragraph 0049, lines 1-8 and Fig. 5);

a virtual local area network created by said switch according to an address in said address table (Switch 66 inserts Virtual Network Identifier information into the packet header to mark it as belonging to a particular Virtual Network according to the lookup for the destination IP

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address, see page 2, paragraph 0012, lines 13-18 and page 2, paragraph 0013, lines 1-8), and assigned to a port of said plurality of ports (see page 2, paragraph 0012, lines 1-5);

a computer coupled to said port (servers for Virtual Network A is coupled to the end point of the Virtual Network Specific Ethernet Link 68, see Fig. 3), said computer (servers for Virtual Network A, see element 74, Fig. 3) including an address (the server has a physical address, see page 2, paragraph 0011, lines 18-23) correlating to said virtual local area network (the physical address maps to the virtual IP address of the Virtual Network, see page 1, paragraph 0010, lines 1-16).

Tingley does not explicitly show a modem coupled to said switch via an Ethernet hub, said modem to exchange information from said virtual private network assigned to said port to an external virtual private network corresponding to said computer.

However, Fluss discloses a cable modem system where a cable modem is coupled to a switch via the Ethernet hub (see elements 200, 203, 206, 102, Fig. 1) where it is used to exchange information from subscribers to web server. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the method of using a switch for exchanging information for the Virtual Networks with the method of exchanging information using cable modem and Ethernet hub taught by Fluss. Having a cable modem coupled to Switch 66 would provide the combination such that a computer that is supported by cable modem would be able to exchange information with Virtual Networks that are supported by the switch. The motivation to do so is to make the communications possible between cable modem subscribers of an external virtual private network and virtual networks of

servers so that subscribers can access servers at Virtual Networks via the cable modem connection.

Regarding claim 33, Tingley discloses all the aspects of the claimed invention set forth in the rejection of claim 9 above, except fails to explicitly show the system of claim 32, further comprising a broadband connection to said modem, said broadband connection including said external virtual private network.

However, Tingley further discloses that broadband signaling technique can be used to implement the method of Tingley (see page 7, paragraph 0066, lines 1-13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of using a switch for exchanging information for the Virtual Networks such that broadband connection is made to connect the subscribers to the cable modem such as the broadband signaling technique taught by Tingley. The motivation to do so is to provide larger bandwidth for subscribers to support bandwidth intensive multimedia applications when accessing servers of the virtual networks.

Regarding claim 34, Tingley further discloses the system of claim 32, wherein said address table is stored as a file (see page 7, paragraph 0059, lines 18-22).

Regarding claim 35, Tingley further discloses the system of claim 32, further comprising a private port coupling said virtual local area network to said switch (see the endpoint of Virtual

Network A that couples Virtual Network A to switch 66 and Virtual Networking Device, Fig.

3).

Response to Arguments

9. Applicant's arguments filed on 2/2/2005 have been fully considered but they are not persuasive.

Applicant argued that the Tingley provisional application may not contain the subject matter of the published Tingley application used in the rejection and further asked the Examiner to provide some evidence in the provisional Tingley application to support the subject matter of the published Tingley application used in the rejection. In response to this argument, the Tingley provisional application has been carefully examined by the Examiner to provide evidence to support the subject matter of the published Tingley application used in the rejection. The Examiner has found that the Tingley provisional application does support the subject matter of the published Tingley application used in the rejection (see pages 3-8 and Fig. 1 of the provisional application). Therefore, in light of the Tingley provisional application disclosure, claims 1-9, 11-12, 14-21, 23-29, 31 stand rejected under 35 U.S.C. 102(e) as being anticipated by Tingley et al. (US Publication 2002/0138628), claims 10, 13, 30 stand rejected as being unpatentable over Tingley in view of Miner et al. (USP 6,804,332), claim 22 stand rejected as being unpatentable over Tingley in view of Thornton et al. (USP 6,363,065), and claims 32-35 stand rejected as being unpatentable over Tingley in view of Fluss (USP 6,304,578).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Mew whose telephone number is 703-305-5300. The examiner can normally be reached on 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDM
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WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER